



Bakersfield to Palmdale Project Section

Open House Meeting Series
September 2018



AGENDA

- **California High-Speed Rail Program**
- **Stakeholder Engagement**
- **Bakersfield to Palmdale Project Section**
- **Environmental Process & State's Preferred Alternative**
- **Next Steps**

CALIFORNIA HIGH-SPEED RAIL PROGRAM



HIGH-SPEED RAIL: Connecting California



Increase Mobility



Needed Alternative



Better Air Quality



Job Growth

SOUTHERN CALIFORNIA: Meeting Our Commitments

- Complete Statewide Phase 1 System Env. Clearance
- Deliver the Silicon Valley to Central Valley Line as soon as possible
- Deliver the full Phase 1 System
- Invest bookend funds in Urban Corridors in the South and North
- Continue planning for Phase 2 extensions



IT'S HAPPENING!



- Approximately 119 miles
- Madera to North of Bakersfield
- Approximately \$3 Billion Investment
- 21 Active Construction Sites
- 2,000 + Jobs and Counting



STAKEHOLDER ENGAGEMENT



COLLABORATIVE APPROACH BALANCES MULTIPLE PRIORITIES



STAKEHOLDER ENGAGEMENT

- **Community Open Houses**

- » Three rounds of public meetings & webcasts
 - Fall 2015, Summer 2016, Winter 2017
 - Interpreter services provided in Spanish
- » September 2018 Open Houses:
 - Edison: September 10, 2018
 - Lancaster: September 12, 2018



- **Agency/Stakeholder Working Groups**

- » Five rounds of meetings
 - September 2015, March 2016, June 2016
 - January 2017, and September 2018
- » 420+ organizations invited



- **Ongoing Community Activities**

- » 250+ meetings with key stakeholders and community organizations
- » Information booths at various community events
- » Multi-faceted, bilingual approach focused on reaching all communities
- » Partnership opportunities welcome
- » “24/7” public online commenting

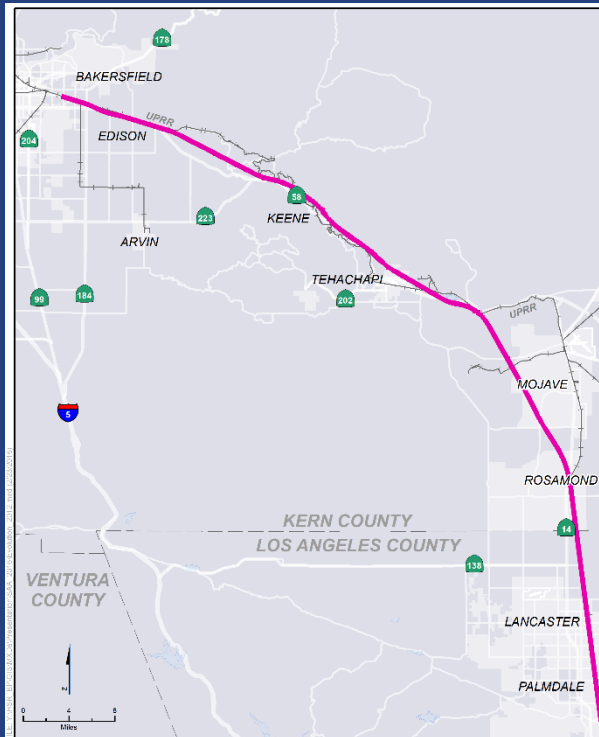
BAKERSFIELD TO PALMDALE PROJECT SECTION



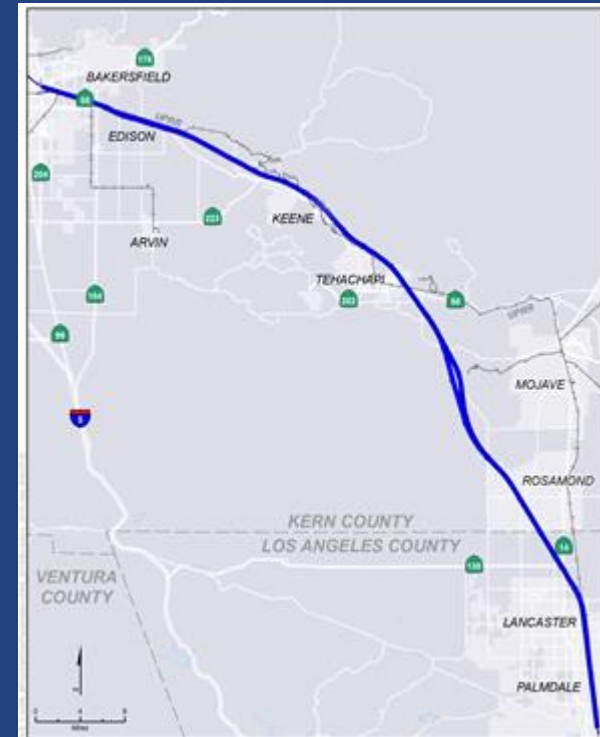
ROUTE CONCEPTS STUDIED OVER TIME



2010



2012

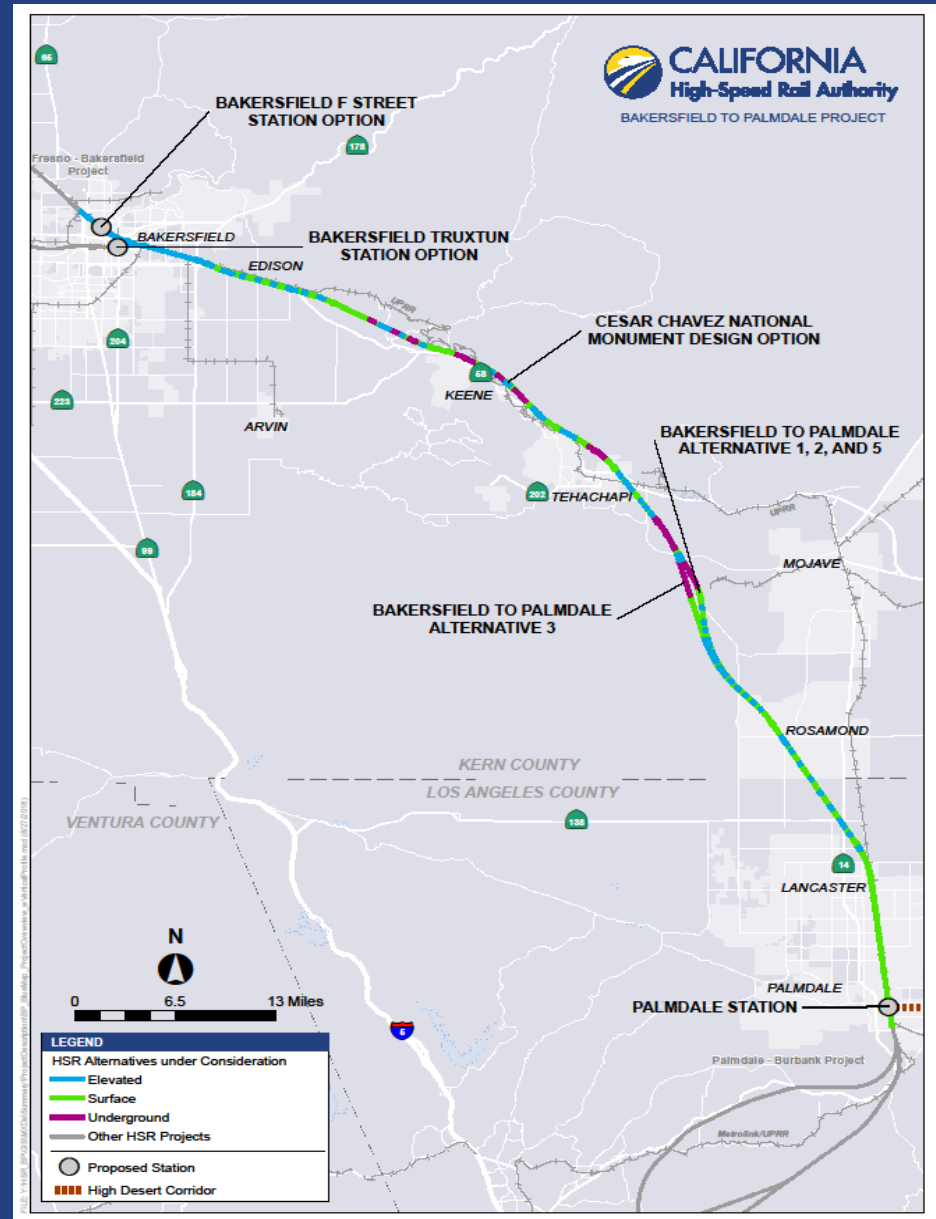


2018

Close Passenger Rail Gap Between the Central Valley and Southern California with Express Electric Service

BAKERSFIELD TO PALMDALE ROUTES CURRENTLY UNDER STUDY

- Alternatives 1, 2, 3, 5
- Length: Approx. 80 Miles
- Two Stations
 - » Bakersfield (Central Valley)
 - » Palmdale (Antelope Valley)
- Key Considerations
 - » Downtown areas, schools, and communities
 - » Green energy generation
 - » Ranches, agriculture, mining, businesses
 - » Natural lands, monuments



BAKERSFIELD TO PALMDALE STATIONS

- **Station Facilities**

- » Integrate with existing facilities, where available
- » Tracks & platforms
- » Passenger amenities
- » Parking (bike & car)
- » Pick-up/drop-off (all modes)

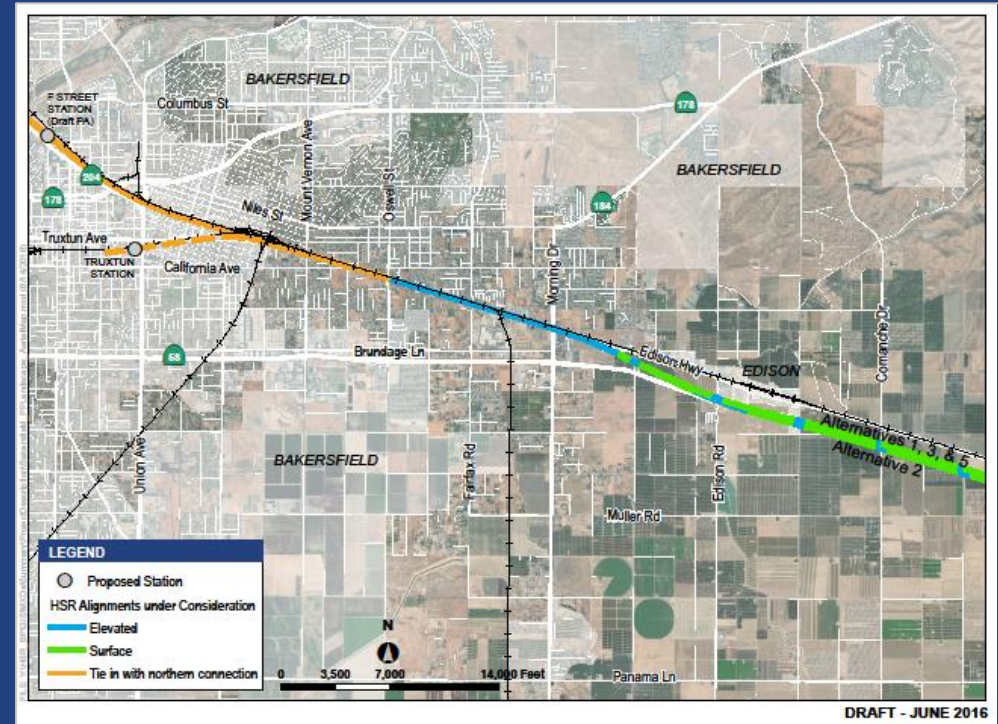
- **Station Access**

- » Pedestrian access & safety
- » Bike connectivity to station
- » Direct rail & transit connections
- » Auto circulation (traffic considerations)

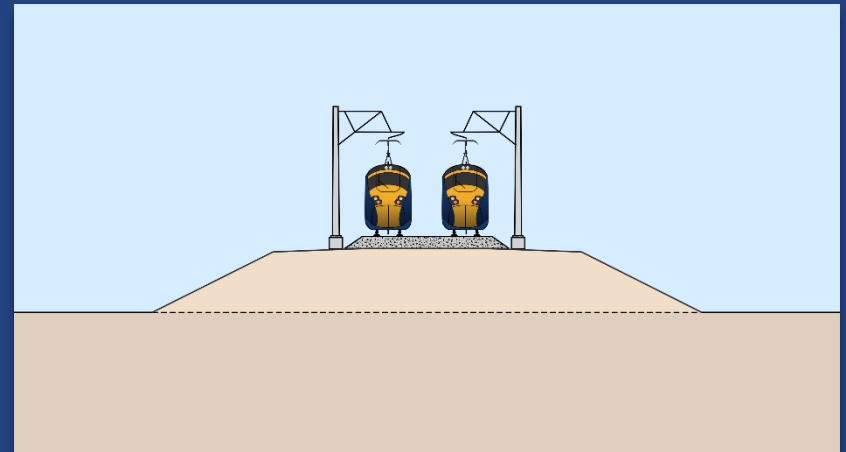


BAKERSFIELD/EDISON AREA

- Two routes studied
- Connect to preferred Bakersfield station (F Street)
- Minimize impacts to Edison school and businesses

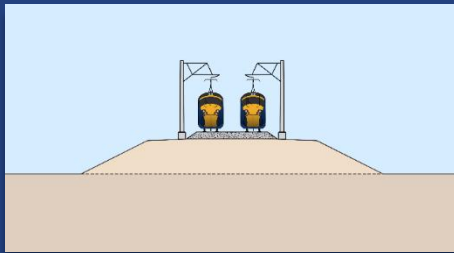
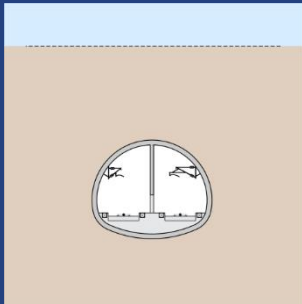


School Street Looking Southwest

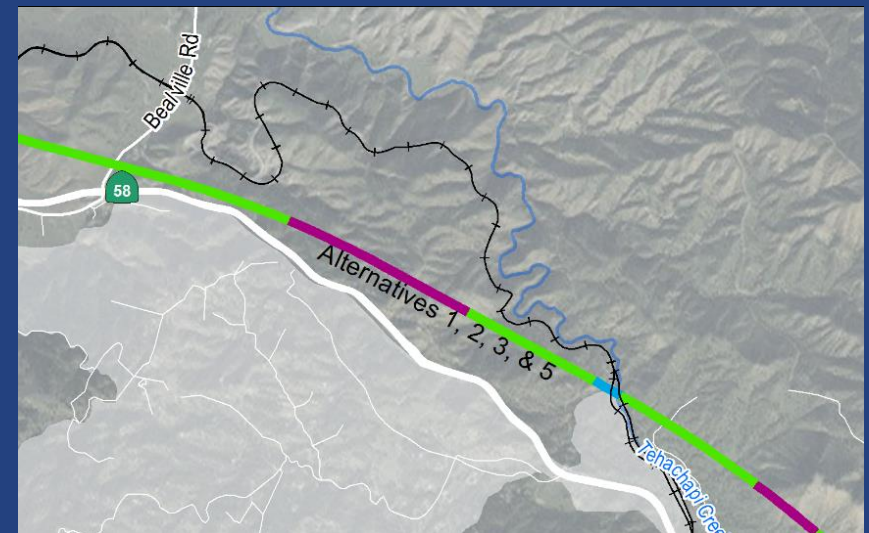


NORTH SLOPE OF THE TEHACHAPIS

- Cross Caliente Creek and climbing into the Tehachapis



Bena Road Facing North



CESAR CHAVEZ NATIONAL MONUMENT

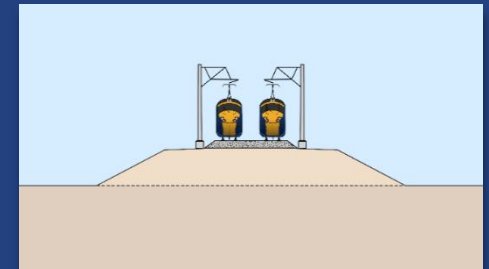
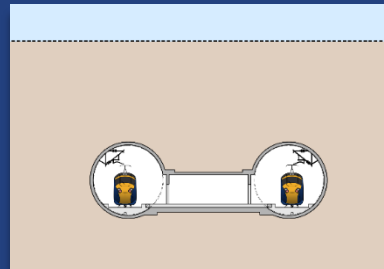
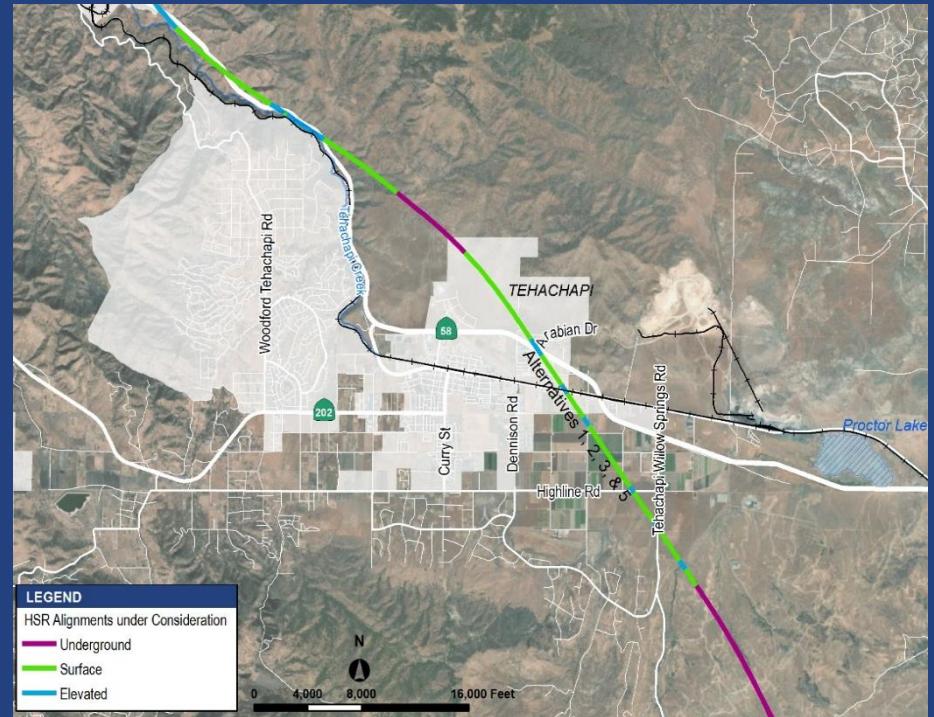
- Minimize impact to Cesar Chavez National Monument and National Chavez Center



CITY OF TEHACHAPI

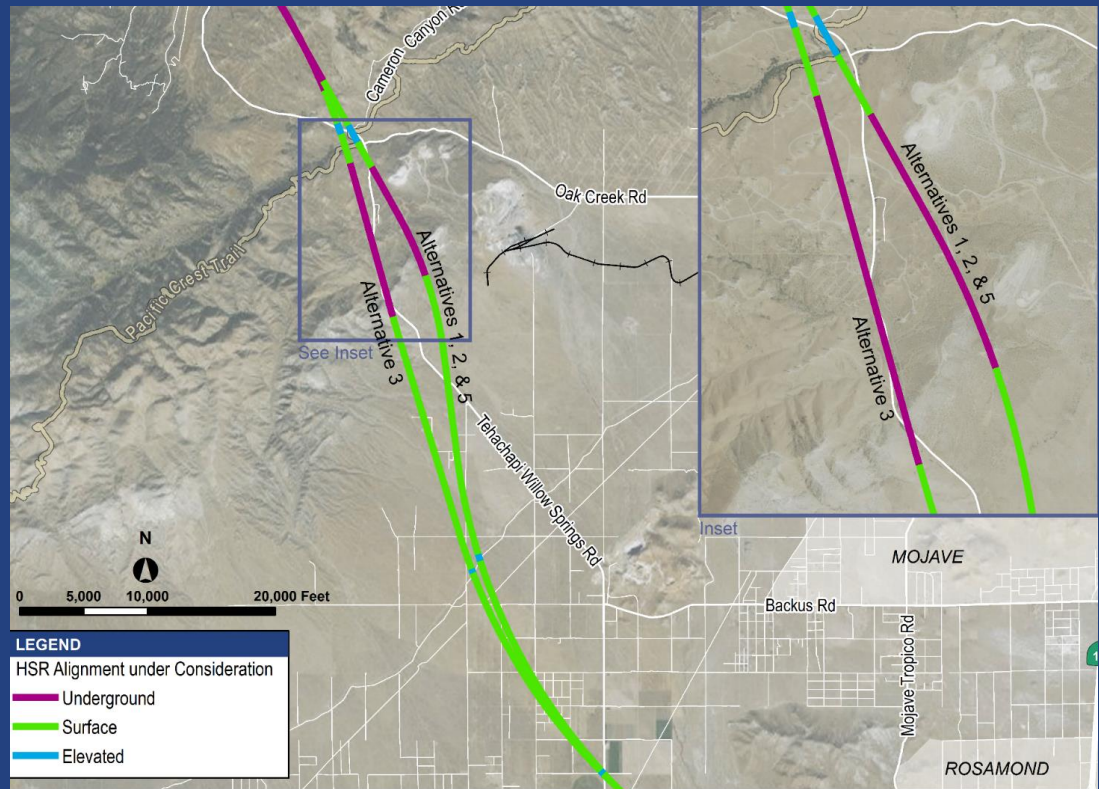
- Avoid new development, recreation areas, and downtown
- Cross SR 58 Near Dennison Road
- Minimize impact to existing homes and businesses

SR 58 Looking Southeast

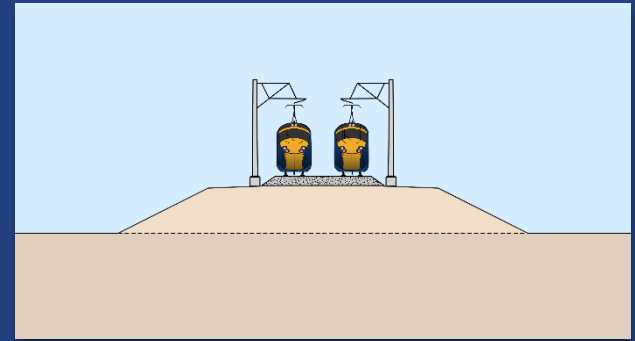
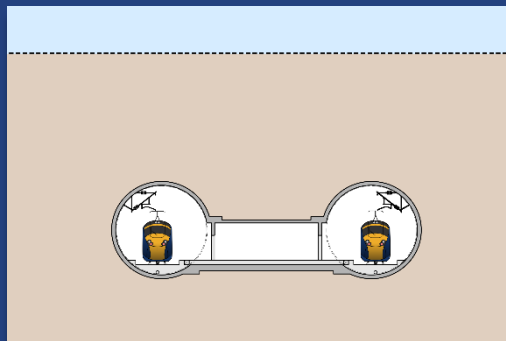


SOUTH SLOPE OF THE TEHACHAPIS & MOJAVE AREA

- Two routes studied
- Minimize potential impacts to Pacific Crest Trail
- Optimize tunnel design
- Reduce impacts to existing facilities

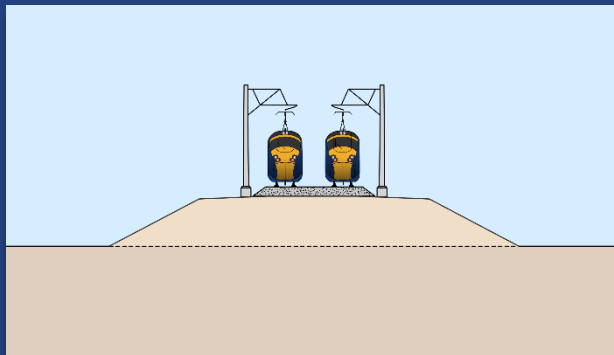
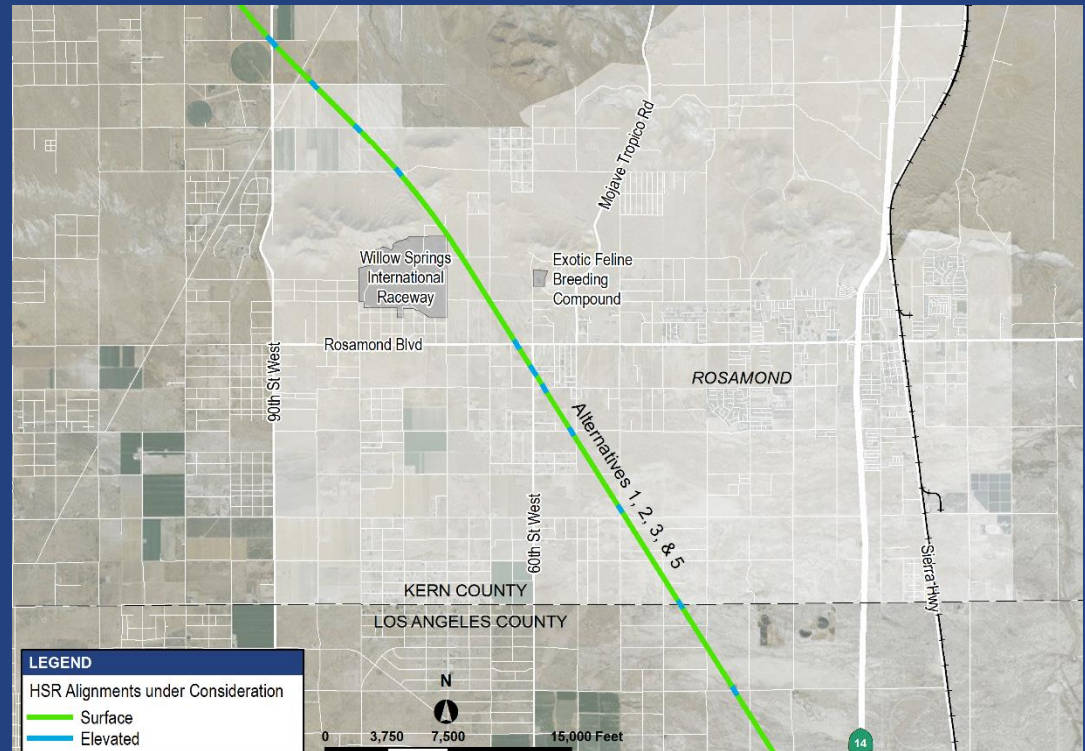


Pacific Crest Trail Looking West



COMMUNITY OF ROSAMOND

- Avoid the Downtown area
- Accommodate circulation, street crossings, wildlife, drainage and utilities



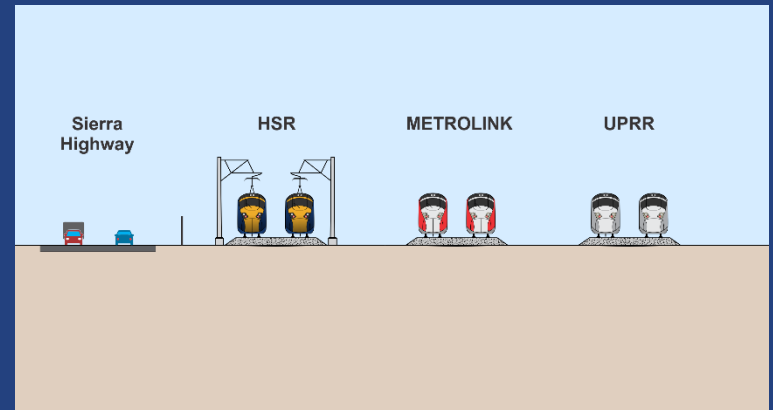
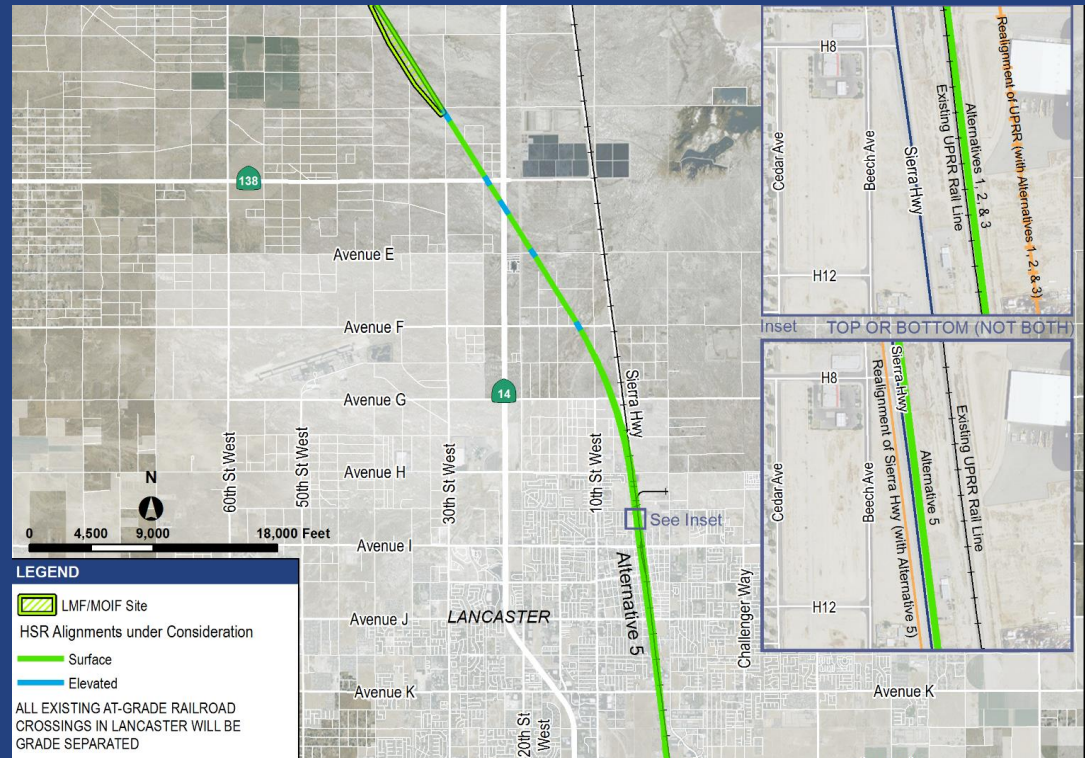
Rosamond Avenue Looking West-Northwest



CITY OF LANCASTER

- Two routes studied
- Consolidate rail lines into one sealed rail corridor
- Reduce impacts from Grade Separations

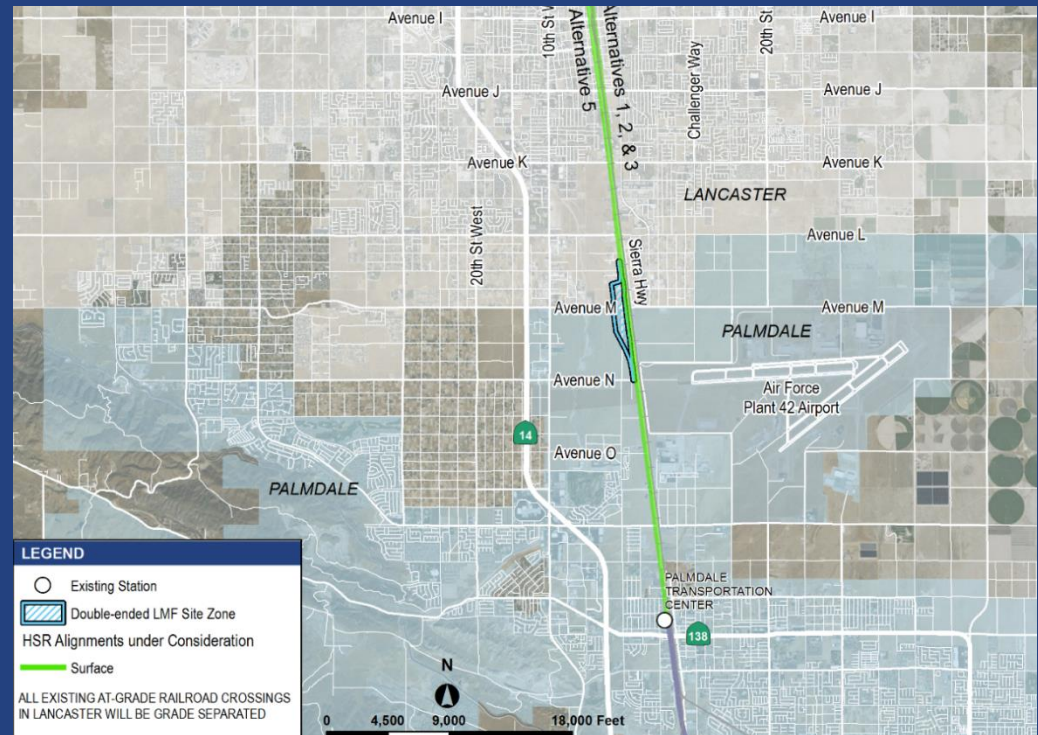
Sierra Highway Bike Path Looking North



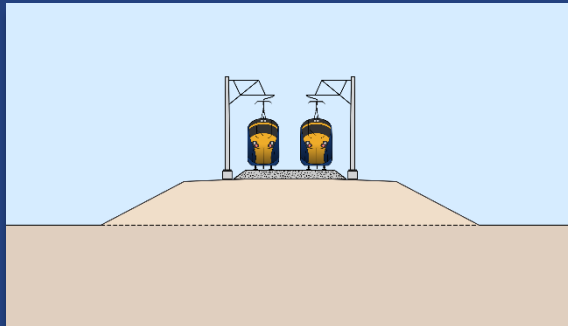
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CONNECTION TO PALMDALE STATION

- Avoids Plant 42 & Palmdale Airport Airspace
- Consolidate rail lines into one sealed rail corridor
- Reduce impacts from grade separations
- Plan for a multi-modal shared station and future out of state connections



Avenue Q7 Looking West



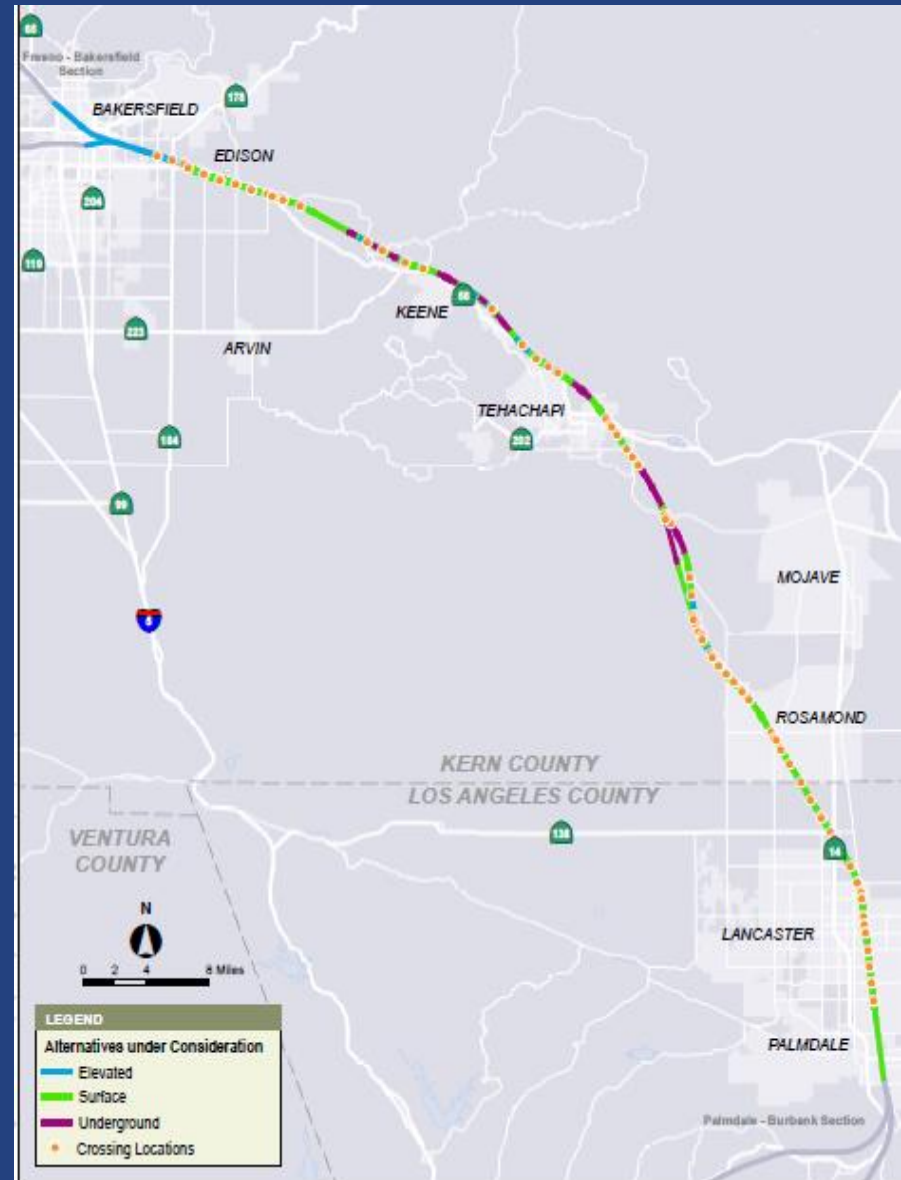
PROJECT FEATURES: GRADE SEPARATIONS

- **Grade Separations (73 roads)**

Cities/Communities

1. Edison – 20
2. Keene – 6
3. Tehachapi – 5
4. Antelope Valley – 17
5. Rosamond – 12
6. Lancaster – 8
7. Palmdale – 5

- **Additional Future Grade Separations Planned by Local Authorities**



ADDITIONAL HIGH-SPEED RAIL FEATURES

- **Overhead Catenary Systems**

- » Supplies electric energy to rail vehicles



Overhead Catenary System

- **Paralleling Station**

- » Provides voltage stabilization and equalizes current flow
- » The Paralleling Stations are located every 5 miles between Switching Stations and Substations



Paralleling/Switching Station

- **Switching Station**

- » Provides for transfer of power supply from one substation to another
- » Located approximately every 30 miles near the mid-point between the substations

- **Communication Tower**

- » Uses a radio-based communications network to provide positive train control
- » Located every 2-3 miles



Communication Tower

- **Maintenance Facilities**

- **Maintenance of Way**

CORRIDOR/SHARED CORRIDOR FEATURES

- **Corridor Protection**

- » Fencing
- » Walls
- » Sound walls

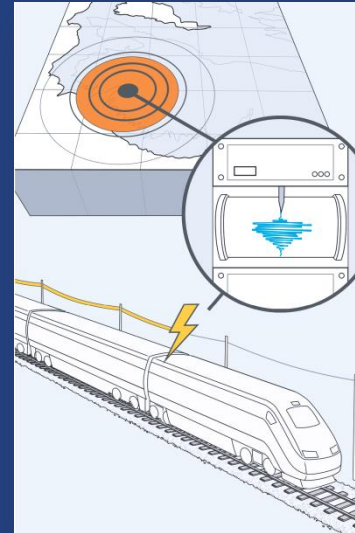
- **Positive Train Control**

- » Restricts speed limits and serves as fail-safe system
- » Takes over system, preventing running red signals

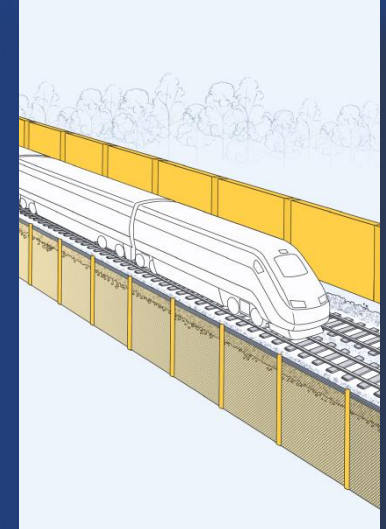
- **Corridor Intrusion Detection**

- **Early Earthquake Warning System**

- » Detects initial wave produced by a seismic event
- » Immediately cuts off power to trains



Early Earthquake Warning



Intrusion Protection

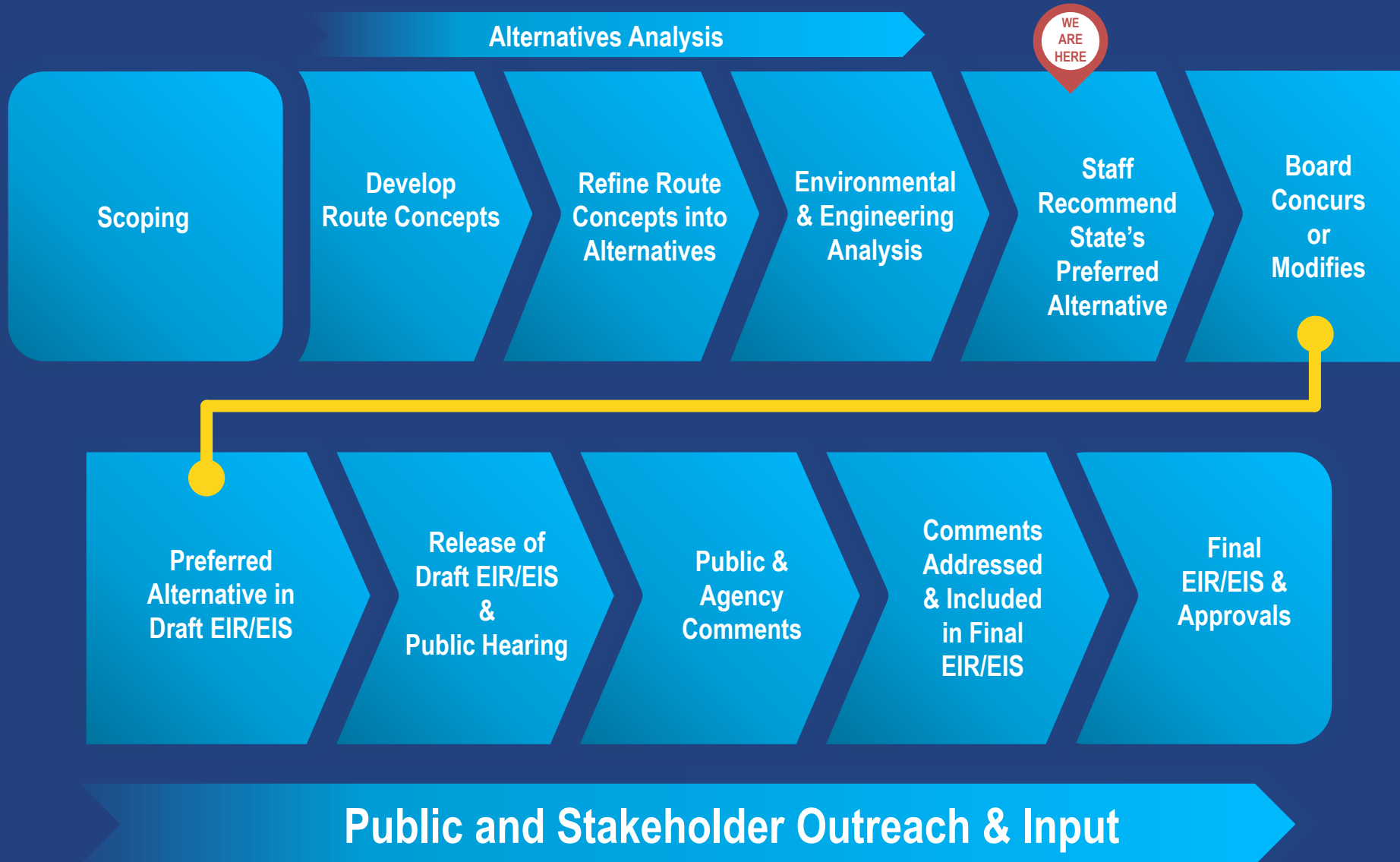


Soundwall Example

ENVIRONMENTAL PROCESS & STATE'S PREFERRED ALTERNATIVE

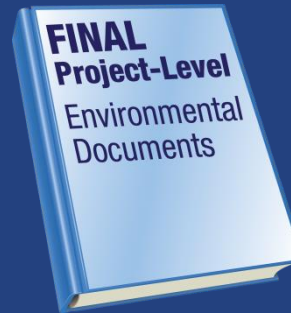
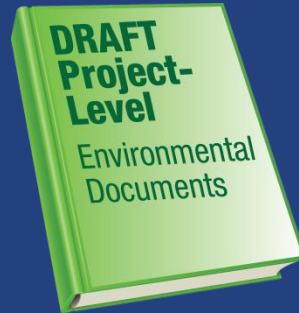


ENVIRONMENTAL PROCESS & IDENTIFYING A STATE'S PREFERRED ALTERNATIVE



ENVIRONMENTAL DOCUMENT CONTENT

Environmental Documents Analyze These Topics



- Aesthetics & Visual Quality
- Air Quality & Global Climate Change
- Biological Resources & Wetlands
- Capital & Operating Costs
- Cultural Resources
- Cumulative Impacts
- Electromagnetic Interference/Fields (EMI/EMF)
- Environmental Justice
- Geology, Soils, Seismicity & Paleontology
- Hazardous Materials & Wastes
- Hydrology & Water Resources
- Noise & Vibration
- Parks, Recreation & Open Space
- Public Utilities & Energy
- Regional Growth
- Safety & Security
- Station Planning, Land Use & Development
- Section 4(f) & Section 6(f) Evaluations
- Socioeconomics & Communities
- Transportation

AVOIDING, MINIMIZING & MITIGATING POTENTIAL IMPACTS

- **Authority strives to:**

1. **Avoid** adverse impacts
2. **Minimize** impacts, when they cannot be avoided
3. **Mitigate** impacts, when they cannot be avoided or minimized

- **Ongoing during Planning & Design**

- » Based on community & stakeholder feedback
- » Ongoing agency coordination



IDENTIFYING STATE'S PREFERRED ALTERNATIVE

- The Authority's Board of Directors is scheduled to identify the State's Preferred Alternative in October 2018
- Federal NEPA processes encourages federal and state agencies to identify Preferred Alternative before the release of the Draft Environmental Documents
- Staff will recommend that Alternative 2 be identified as the State's Preferred Alternative in the Draft EIR/EIS
- Staff further recommends incorporation of the CCNM Design Option



“Provide the public with electric-powered HSR service that offers predictable and consistent travel times between major urban centers”
-HSR EIR/S Purpose and Need

STATE'S PREFERRED ALTERNATIVE – ALTERNATIVE 2

- Studied alternatives 1, 2, 3 & 5
- Two Stations
 - » Bakersfield (Central Valley) (F Street Station Preferred Option)
 - » Palmdale (Antelope Valley)
- Features of Alternative 2
 - » Does not require relocation of SR 58
 - » Includes CCNM Design Option
 - » Has fewer miles of tunnel construction
 - » Consolidates rail line into one corridor in Lancaster and Palmdale
 - » Results in fewer potential impacts to residents, businesses, community resources and the environment



NEXT STEPS



STATE'S PREFERRED ALTERNATIVE OPEN HOUSE MEETINGS

- **Lancaster** Wednesday, Sept. 12th / Stanley Kleiner Activity Building

**All meetings will be held from 5:30 p.m. – 7:30 p.m.*

BAKERSFIELD TO PALMDALE PROJECT SECTION *



STAY INVOLVED

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